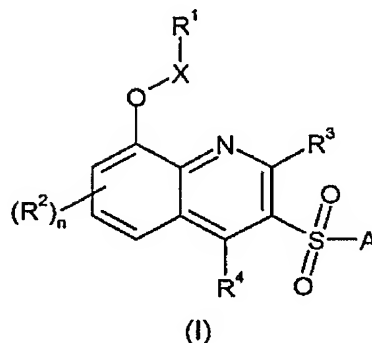


# Claims

1. A compound of formula (I) or a pharmaceutically acceptable salt thereof:



wherein:

- R<sup>1</sup> represents a group of formula -NR<sup>a</sup>R<sup>b</sup> or a nitrogen containing heterocyclyl group optionally substituted by one or more (eg. 1 to 4) C<sub>1-6</sub> alkyl groups;
- 10 X represents a bond, -(CR<sup>c</sup>R<sup>d</sup>)-, -(CR<sup>c</sup>R<sup>d</sup>)-(CR<sup>e</sup>R<sup>f</sup>)-, -(CR<sup>c</sup>R<sup>d</sup>)-(CR<sup>e</sup>R<sup>f</sup>)-(CR<sup>g</sup>R<sup>h</sup>)-, or -heterocyclyl-, wherein said heterocyclyl group may be optionally substituted by one or more (eg. 1 to 4) C<sub>1-6</sub> alkyl groups; such that when R<sup>1</sup> represents -NR<sup>a</sup>R<sup>b</sup>, X does not represent a bond nor -(CR<sup>c</sup>R<sup>d</sup>)-;
- R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, R<sup>f</sup>, R<sup>g</sup> and R<sup>h</sup> independently represent hydrogen or C<sub>1-6</sub> alkyl;
- 15 R<sup>2</sup> represents halogen, cyano, -CF<sub>3</sub>, -CF<sub>3</sub>O, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkanoyl or a group -CONR<sup>5</sup>R<sup>6</sup>;
- n represents 0 to 3;
- R<sup>3</sup> and R<sup>4</sup> independently represent hydrogen, halogen, cyano, -CF<sub>3</sub>, -CF<sub>3</sub>O, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkanoyl or a group -CONR<sup>5</sup>R<sup>6</sup>;
- 20 R<sup>5</sup> and R<sup>6</sup> independently represent hydrogen or C<sub>1-6</sub> alkyl or together with the N atom to which they are attached may be fused to form a 5- to 7- membered N-containing aromatic or non-aromatic heterocyclic ring optionally interrupted by an O or S atom;
- A represents an -aryl, -heteroaryl, -aryl-aryl, -aryl-heteroaryl, -heteroaryl-aryl or -heteroaryl-heteroaryl group;
- 25 wherein said aryl and heteroaryl groups of A may be optionally substituted by one or more (eg. 1, 2 or 3) substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, trifluoromethyl, trifluoromethoxy, C<sub>1-6</sub> alkyl, trifluoromethanesulfonyloxy, pentafluoroethyl, C<sub>1-6</sub> alkoxy, arylC<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxyC<sub>1-6</sub> alkyl, C<sub>3-7</sub> cycloalkylC<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkanoyl, C<sub>1-6</sub> alkoxy carbonyl, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylsulfonyloxy, C<sub>1-6</sub> alkylsulfonylC<sub>1-6</sub> alkyl, arylsulfonyl, arylsulfonyloxy, arylsulfonylC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylsulfonylamido, C<sub>1-6</sub> alkylamido, C<sub>1-6</sub> alkylsulfonylamidoC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylamidoC<sub>1-6</sub> alkyl, arylsulfonylamido, arylcarboxamido, arylsulfonylamidoC<sub>1-6</sub> alkyl, arylcarboxamidoC<sub>1-6</sub> alkyl, aroyl, aroylC<sub>1-6</sub> alkyl, arylC<sub>1-6</sub> alkanoyl, or a group CONR<sup>7</sup>R<sup>8</sup> or SO<sub>2</sub>NR<sup>7</sup>R<sup>8</sup>, wherein
- 35 R<sup>7</sup> and R<sup>8</sup> independently represent hydrogen or C<sub>1-6</sub> alkyl or R<sup>7</sup> and R<sup>8</sup> together with the

nitrogen atom to which they are attached may form a nitrogen containing heterocyclyl or heteroaryl group;  
or solvates thereof.

- 5     2.     A compound of formula (I) as defined in claim 1, wherein A represents aryl optionally substituted by one or more halogen atoms or heteroaryl.
  
- 10     3.     A compound of formula (I) as defined in claim 1 or claim 2, wherein R<sup>1</sup> represents NR<sup>a</sup>R<sup>b</sup>, wherein R<sup>a</sup> and R<sup>b</sup> are independently hydrogen or methyl; or a nitrogen containing heterocyclyl group selected from pyrrolidinyl, piperidinyl, morpholinyl, azabicyclo[2.2.2]oct-3-yl or azepinyl optionally substituted by methyl or isopropyl.
  
- 15     4.     A compound of formula (I) as defined in claim 1 selected from:  
[2-(3-Phenylsulfonylquinoline-8-yloxy)ethyl]dimethylamine;  
8-([(2S)-1-Methyl-2-pyrrolidinyl]methyl)oxy-3-(phenylsulfonyl) quinoline;  
3-(Phenylsulfonyl)-8-([(2S)-2-pyrrolidinylmethyl]oxy)quinoline;  
3-(Phenylsulfonyl)-8-([2-(1-pyrrolidinyl)ethyl]oxy)quinoline;  
3-(Phenylsulfonyl)-8-[(3R)-3-pyrrolidinyl]oxyquinoline;  
Dimethyl(1-methyl-2-[[3-(phenylsulfonyl)-8-quinolinyl]oxy] propyl)amine;  
20     3-(Phenylsulfonyl)-8-([(2R)-2-pyrrolidinylmethyl]oxy)quinoline;  
3-(Phenylsulfonyl)-8-([2-(1-piperidinyl)ethyl]oxy)quinoline;  
8-([2-(4-Morpholinyl)ethyl]oxy)-3-(phenylsulfonyl)quinoline;  
8-(1-Azabicyclo[2.2.2]oct-3-yloxy)-3-(phenylsulfonyl)quinoline;  
3-(Phenylsulfonyl)-8-([3-(1-piperidinyl)propyl]oxy)quinoline;  
25     8-([2-(Hexahydro-1H-azepin-1-yl)ethyl]oxy)-3-(phenylsulfonyl)quinoline;  
((3S,4R)-4-[[3-(Phenylsulfonyl)-8-quinolinyl]oxy]tetrahydro-3-furanyl)amine;  
(3S,4R)-N,N-Dimethyl-4-[[3-(phenylsulfonyl)-8-quinolinyl]oxy]tetrahydro-3-furanamine;  
3-(Phenylsulfonyl)-8-(3-piperidinyl)oxyquinoline;  
3-(Phenylsulfonyl)-8-(4-piperidinyl)oxyquinoline;  
30     8-([(3R)-1-Methyl-3-pyrrolidinyl]oxy)-3-(phenylsulfonyl)quinoline;  
8-([(3S)-1-Methyl-3-pyrrolidinyl]oxy)-3-(phenylsulfonyl)quinoline;  
8-[(3R)-1-Azabicyclo[2.2.2]oct-3-yloxy]-3-(phenylsulfonyl)quinoline;  
3-(Phenylsulfonyl)-8-[(3S)-3-pyrrolidinyl]oxyquinoline;  
8-[(1-Methyl-4-piperidinyl)oxy]-3-(phenylsulfonyl)quinoline;  
35     8-[(1-Azabicyclo[2.2.2]oct-2-ylmethyl)oxy]-3-(phenylsulfonyl)quinoline;  
8-[(1-Methyl-3-piperidinyl)oxy]-3-(phenylsulfonyl)quinoline;  
8-[(3-Morpholinylmethyl)oxy]-3-(phenylsulfonyl)quinoline;  
8-([(2S)-1-(1-Methylethyl)-2-pyrrolidinyl]methyl)oxy)-3-(phenylsulfonyl)quinoline;  
N,N-Dimethyl-2-[[3-(phenylsulfonyl)-8-quinolinyl]oxy]-1-propanamine; or  
40     5-Chloro-3-(phenylsulfonyl)-8-([2-(1-pyrrolidinyl)ethyl]oxy)quinoline;  
or a pharmaceutically acceptable salt thereof.

5. A compound of claim 4 wherein the salt is the hydrochloride salt.
6. A pharmaceutical composition which comprises a compound or a pharmaceutically acceptable salt as defined in any one of claims 1 to 5 and a pharmaceutically acceptable carrier or excipient.
7. A compound or pharmaceutically acceptable salt as defined in any one of claims 1 to 5 for use in the treatment of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.
8. The use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5 in the manufacture of a medicament for the treatment or prophylaxis of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.
9. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5 for use in the treatment of depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke.
10. A method of treating depression, anxiety, Alzheimers disease, age related cognitive decline, ADHD, obesity, mild cognitive impairment, schizophrenia, cognitive deficits in schizophrenia and stroke which comprises administering a safe and therapeutically effective amount to a patient in need thereof of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 5.